

REMARKS

Applicant requests favorable reconsideration of this application in view of the foregoing amendments and the following remarks. Claims 5-15 were pending in the application and were rejected in the Office Action. By way of this amendment, Applicant has: (a) canceled claims 9-12, without prejudice or disclaimer; and (b) amended claims 5 and 13. Accordingly, claims 5-8 and 13-15 are respectfully presented for further consideration.

1. Information Disclosure Statement and Claim for Convention Priority

Applicant continues to respectfully request an indication that the Examiner has considered the reference submitted with the Information Disclosure Statement (“IDS”) filed on December 15, 2003. Of course, such an indication may be provided by way of Examiner initials on the form PTO/SB/08 that was submitted along with the IDS.

In addition, Applicant also continues to respectfully request that the next paper issued by the Patent Office include an acknowledgment that the certified copy of the priority document was received; the certified copy of JP 2002-363703 (which was filed on December 16, 2002) was submitted with the instant application on December 15, 2003.

1. Rejections of Claims 5-15

The Examiner rejected claims: (a) 5, 6, 9-11 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,112,585 (“Schrotte”); (b) 5 and 7-11 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,018,993 (“Norman”); and (c) 6 and 12-15 under 35 U.S.C. § 103(a) as allegedly being obvious when considering Norman in view of U.S. Patent Application Publication No. 2003/0197603 (“Stewart”). Preliminarily, these rejections are now moot with respect to claims 9-12, which have been canceled herein, without prejudice or disclaimer. Accordingly, these rejections will be addressed, and respectfully traversed, with respect to claims 5-8 and 13-15.

As amended herein, claim 5 (*i.e.*, the claim from which claims 6-8 depend) recites a tire pressure detecting apparatus for a vehicle. The tire pressure detecting apparatus includes, among other possible things (*italic emphasis added*):

at least two terminals, each of the terminals comprising:
 a tire pressure sensor configured to detect a tire pressure; and
 a transmitter configured to transmit tire pressure data based on
 the detected tire pressure;
at least two receivers; and
a controller,

wherein each of the terminals is attached to a corresponding tire that is positioned in a respective area of the vehicle;

wherein each of the receivers is attached to a part of the vehicle corresponding to an associated tire,

wherein each of the receivers is configured to receive the tire pressure data transmitted by the transmitters and to detect and transmit a reception level of the received tire pressure data,

wherein the controller is configured to identify the receiver that has the highest reception level,

wherein the controller is configured to obtain the tire pressure data from the identified receiver, and

wherein the controller is configured to relate the obtained tire pressure data with the tire associated with the identified receiver.

Similarly, as amended herein, claim 13 (*i.e.*, the claim from which claims 14 and 15 depend) also recites a tire pressure detecting apparatus for a vehicle. This tire pressure detecting apparatus includes, among other possible things (*italic emphasis added*):

a plurality of terminals, wherein each of the terminals is positioned proximate a corresponding tire of the vehicle, wherein each of the terminals is configured to detect a tire pressure of the corresponding tire, wherein each of the terminals is configured to transmit a tire pressure signal corresponding to the detected tire pressure, and wherein each of the terminals comprises:

a tire pressure sensor configured to detect the tire pressure; and

a transmitter configured to transmit the tire pressure signal based on the detected tire pressure;

a controller, wherein the controller is configured to identify the pressure in, and the location of, each of the tires; and

a plurality of receivers, wherein each of the receivers is associated with a corresponding terminal,

wherein each of the receivers is configured to receive tire pressure signals transmitted by all of the transmitters, and

wherein each of the receivers is configured to detect and transmit a reception level of each tire pressure signal received.

As hereafter explained in detail, Schrotte, Norman, and Stewart (standing alone or combined) fail to teach or suggest the tire pressure detecting apparatuses recited in claims 5 and 13.

The instant application teaches that each wheel 21-24, which may be moved during, *e.g.*, a tire rotation, is provided with a terminal 31-34 that includes a tire pressure sensor and a transmitter. The invention also includes stationary *receivers* 41-44 that are respectively provided proximate each of the wheels. *See Fig. 1.* All of the receivers 41-44 receive signals transmitted by each of the terminals 31-34; RSSI circuits of the receivers 41-44 then detect the reception level of the received signals. The receivers 41-44 then generate signals that are reflective of the reception level of the signals received and transmit the reception level signals

to the ECU 5. *See* p. 5, lines 20-32. The ECU 5 then determines which receiver 41-44 is closest to the particular terminal 31-34 on the basis of the reception level signals received by each of the receivers 41-44. *See* p. 6, lines 1-8. As a result, even if the tires are rotated, the ECU 5 can readily determine which tire is proximate each receiver 41-44. *See* p. 7, lines 8-16.

Schrotte: In contrast to the present invention, Schrotte fails to teach or suggest the tire pressure detecting apparatuses recited in claims 5 and 13 because Schrotte fails to teach or suggest multiple receivers that satisfy each of the limitations of claims 5 and 13. More specifically, although Schrotte teaches multiple receiver antennas A, B, C, N (*see* Fig. 1), the receiver antennas do not transmit reception level signals. Rather, the receiver antennas simply transmit the signal received to a single receiver. The sole receiver determines the field strength of the signals transmitted by each of the antennas A, B, C, N. *See, e.g.*, col. 7, line 44 – col. 8, line 3. Moreover, whereas claims 5 and 13 recite multiple receivers that are configured to determine the reception level of a received signal, Schrotte teaches away from such recitation by stating that the use of the sole receiver is as “essential feature” of that invention. *See* col. 5, lines 8-11.

Norman: Similar to Schrotte, Norman teaches that the evaluation of the received signal strength is performed by a sole receiving and analysis system, which is connected to all of the receiving antenna. *See* Norman at Figs. 1 and 2. As a result, Norman also fails to teach or suggest multiple receivers each of which is configured to ascertain and transmit a reception level of the received signals.

Stewart: Although Stewart teaches detectors 414, 416 that detect the signal strength of the front wheels 404, 406 and the rear wheels 408, 410, respectively, neither of the detectors 414, 416 is part of a receiver that is associated with specific wheel. *See* Stewart at Fig. 4; ¶ [0083]. As a result, Stewart also fails to teach or suggest multiple receivers each of which is configured to ascertain and transmit a reception level of the received signals.

For at least the foregoing reasons, it is clear that Schrotte, Norman, and Stewart (standing alone or combined) fail to teach or suggest the tire pressure detecting apparatuses recited in claims 5 and 13. Accordingly, Schrotte, Norman, and Stewart can not be used to reject claims 5 and 13, or any claim dependent thereon, under 35 U.S.C. §§ 102(b), 103(a). Moreover, as claims 6-8 depend from claim 5 and as claims 14 and 15 depend from claim 13, each of these dependent claims is also allowable over Schrotte, Norman, and Stewart, without regard to the other patentable limitations recited therein. Accordingly, a withdrawal

of the various rejections of claims 5-8 and 13-15 under 35 U.S.C. §§ 102(b), 103(a) is both warranted and earnestly solicited.

CONCLUSION

For the aforementioned reasons, claims 5-8 and 13-15 are now in condition for allowance. A Notice of Allowance at an early date is respectfully requested. The Examiner is invited to contact the undersigned if such communication would expedite the prosecution of the application.

Respectfully submitted,

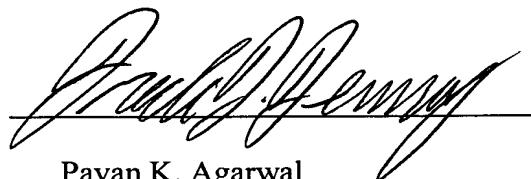
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